

### AMENDMENTS

A clean copy of the claims is found below. Claim 12 has been amended and claims 13 and 15 have been cancelled. A copy of the marked-up claims showing the specific amendments is enclosed as an attachment.

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12. (Four times amended) A method of testing the chronic effect on neural or muscle tissue samples of chemical substances, which comprises:

- providing a detector comprising a plurality of microelectrodes on a substrate for contacting the tissue sample and detecting an electrical property of said tissue sample to which a chemical substance has been added and said plurality of microelectrodes further for applying an electric stimulus to the tissue sample;
- contacting said neural or muscle tissue sample with a plurality of said electrodes;
- measuring the electrical properties of the neural or muscle tissue sample;
- adding said chemical substance to the neural or muscle tissue sample;
- measuring the electrical properties of the neural or muscle tissue sample after said addition of said chemical substance to the neural or muscle tissue sample and at a time which measures chronic response to said chemical substance; and
- comparing said electrical properties before and after said addition of said chemical substance to determine whether said added chemical substance has had an influence on the neural or muscle tissue sample.

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14. The method of claim 12 for testing the effect on neural or muscle tissue samples of chemical substances as medicines, wherein the step of adding chemical substance to the neural or muscle tissue sample comprises adding said chemical substance in a selected concentration to the neural or muscle tissue sample.



16. The method of claim 12 for testing the effect on neural or muscle tissue samples of chemical substances as medicines, wherein the chronic measuring step takes place at least three days after said addition step.

Applicants have amended claim 12 to eliminate the requirement of an image detection system and the consequent optional step of observing the visible properties of the sample. The remainder of the amendments are simply to specify the claimed invention, not to overcome any specific piece of prior art. Claims 13 and 15 have been cancelled. The non-elected claims and the cancelled claims may be pursued in a continuation or divisional application(s).

#### INTERVIEW

Applicants and their attorney wish to express their appreciation to Dr. Baskar for the courtesy and thoughtfulness shown at the personal interview conducted at the USPTO on February 22, 2001 relating to this application. In general, the interview dealt with two points: 1.) applicants' desire to remove the noted limitations from the claims dealing with the requirement to provide an image detection system for observing visible properties of the tissue sample and the measurement of visible properties of the neural or muscle tissues and 2.) the (now found to be erroneous) concern at the European publication corresponding to U.S. Patent No. 5,563,067 (hereafter "'067 patent'") had become a 35 U.S.C. §102(b) reference. As will be mentioned below, this concern was ill-founded because of this application's priority under 35 U.S.C. §120. Applicants further agreed to file a Terminal Disclaimer (submitted herewith) over the claims of the '067 Patent.